

# DOE's Climate Action & Resilience Plan (CARP)

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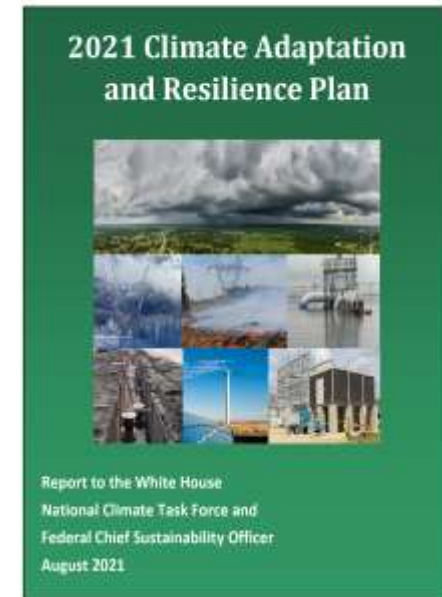
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# What is in the 2021 CARP?

The CARP lists DOE's Climate Policy Statement and its five adaptation priority actions to address.

DOE's Climate Policy Statement:

- Affirms DOE's commitment to lead by example in Federal efforts to manage the short and long-term effects of climate change on our mission, policies, programs, and operations
- Reaffirms DOE's goal to address the challenges in President Biden's Executive Order (E.O.) 14008, *Tackling the Climate Crisis at Home and Abroad*, and to make climate adaptation and resilience an essential element of the work we do
- Lays out DOE's guiding principles and priority adaptation actions



DOE has identified five priority adaptation actions:

**1. Assess Vulnerabilities and Implement Resilience Solutions at DOE Sites**

- Review and conduct vulnerability assessments
- Plan, prioritize, and implement resilience solutions

**2. Enhance Climate Adaptation and Mitigation at DOE Sites**

- Reduce energy and water use in facilities
- Deploy clean energy sources and modernize infrastructure
- Improve ecological and land use management

**3. Institutionalize Climate Adaptation and Resilience in Policies and Processes**

- Implement building standards and codes
- Develop climate-oriented procurement clauses
- Integrate climate action requirements into established DOE processes
- Update DOE directives and technical standards
- Define and communicate resilience roles and responsibilities

DOE has identified five priority adaptation actions:

- 4. Provide Climate Adaptation Tools, Technical Support, and Climate Science Information**
  - Building codes for resilience
  - High performance computing (HPC) systems for climate simulations and local adaptation planning
  - DOE climate vulnerability assessment tools, resources, and training for sites and local communities
  - Provide adaptation and resilience support for energy and environmental justice communities near DOE sites
- 5. Advance Deployment of Emerging Climate Technologies**
  - Develop, demonstrate, and deploy innovative climate technologies
  - Increase awareness of cost-effective resilient technologies

# EM's Projected Initiatives Under the CARP

- Update vulnerability assessments at sites [Priority Action (PA) 1]
- Support institutionalization in DOE policies and directives (PA 3)
- Improve energy efficiency and reduce greenhouse gas emissions (PA 1&2)
  - Modernize/upgrade HVAC systems
  - Deploy LED lighting systems complex wide
  - Deploy solar powered exterior lighting
  - Pursue LEED certification for existing and new buildings wherever feasible
- Convert to zero-emission vehicle fleets (PA 1&2)
  - Right-size and convert current fleet to EVs
  - Install charging infrastructure

# EM's Projected Initiatives Under the CARP

- Move to renewable and zero-emission energy sources (PA 1&2)
  - Explore installation of on-site zero-emission energy sources (SRS, WIPP, Hanford)
  - Assess conversion of coal-powered steam and electricity plants and facilities to natural gas and biomass
- Address climate-related risks and increase resilience at our sites (PA 1&2)
  - Accelerate D&D for excess facilities
  - Accelerate removal/disposal of hazardous and radioactive waste and contamination
  - Complex-wide, repair and replace degraded roofs
  - Modernize/right-size electric systems and grids



# EM's Future: Sustainable & Resilient Sites & Communities



## In Conclusion, a Great Opportunity for DOE/EM:

- The CARP provides guidance for EM to incorporate climate change adaptation and mitigation into daily business operations at each site
- Successful implementation of this plan requires collaboration and coordination across EM, with other program offices, and with non-Federal stakeholders
- The priority actions and activities will be incorporated into EM's planning, decision making, operations, and budget processes, including integration within Site Sustainability Plans, D&D, and remedy/clean up selection
- DOE will track, review and revise the CARP to acknowledge successes and lessons learned as well as continue to set ambitious goals
- By creating a sustainable and climate resilient complex, EM ensures its mission continues to be delivered while helping its communities adapt and prepare, as well as promoting energy and environmental justice and well-paying jobs